#### **Session Program**

9-13 Sept 2019



# CEMP Stars as Probes of First-Star Nucleosynthesis, the IMF, and Galactic Assembly

#### THEORETICAL APPROACH TO CEMP STARS, FIRST STARS, AND FIRST GALAXIES

University of Geneva A100 Sciences II, A100 Sciences II, 30 quai Ernest Ansermet, 1205 Geneva 30, quai Ernest Ansermet 1205 Geneva

# Tuesday 10 September

16:20	THEORETICAL APPROACH TO CEMP STARS, FIRST STARS, AND FIRST GALAXIES: 1 (Chair: Sylvia Ekström) Session
	<b>16:20-16:50</b> The First Stars: Our Emerging Theoretical Framework
	<b>Speaker</b> Prof. Volker Bromm
	<b>16:50-17:10</b> Fragmentation Condition in a Primordial Accretion Disk
	<b>Speaker</b> Ms Wei-Ting Liao
	17:10-17:30 Thermodynamics of H2 in the context of the First Stars
	<b>Speaker</b> Piyush Sharda
	17:30-17:50
	Surviving Pristine Stars and the Implications of their Non-detection Paper Number
17:50	<b>Speaker</b> Mattis Magg

#### Wednesday 11 September

09:00	THEORETICAL APPROACH TO CEMP STARS, FIRST STARS, AND FIRST GALAXIES: 2 (Chair: David Yong) Session
	09:00-09:30 The variety of CEMP-no abundances: back-and-forth mixing between H- and He- burning Speaker Prof. André Maeder
	09:30-09:50 Probing the rotation of early massive stars from the abundances of metal-poor stars Speaker Arthur Choplin
	09:50-10:10 Mechanical mass loss in very metal poor massive stars Speaker Mr Sébastien Martinet
10:30	10:10-10:30 An Alternative Progenitor Scenario for the Most Iron-poor CEMP-no Stars. Speaker Ondrea Clarkson
11:00	THEORETICAL APPROACH TO CEMP STARS, FIRST STARS, AND FIRST GALAXIES: 3 (Chair: Raphael Hirschi) Session
	11:00-11:20   The origin of CEMP-i stars - Results from a comprehensive multi-method simulations approach   Speaker   Falk Herwig
	11:20-11:40 A new grid of Geneva stellar evolution models for Population-III stars   Speaker Laura Murphy
	11:40-12:00 Low-mass primordial stars: i-process nucleosynthesis during core-flash proton ingestion episodes?

Speaker Dr Simon Campbell

#### 12:00-12:20

Observational Evidence for Aspherical Jet-Like Population III Supernova Explosion

<b>Speaker</b> Rana Ezzeddine	
12:20-12:40 <b>Speaker</b> Gen Chiaki	CEMP star formation from faint supernova explosions

12:40

# Thursday 12 September

09:00	
	THEORETICAL APPROACH TO CEMP STARS, FIRST STARS, AND FIRST GALAXIES: 4 (Chair: André Maeder)
	Session
	09:00-09:30 Simulating and Observing the First Galaxies
	<b>Speaker</b> Prof. John Wise
	09:30-10:00 Building-up Pop III IMF in the Milky Way-like galaxies
	<b>Speaker</b> Dr Shingo Hirano
	10:00-10:30 First star mass distribution: empirical constraints
10:30	<b>Speaker</b> Prof. Salvadori Stefania
11:00	THEORETICAL APPROACH TO CEMP STARS, FIRST STARS, AND FIRST GALAXIES: 5 (Chair: Georges Meynet) Session
	11:00-11:30 Connecting the first galaxies with ultra faint dwarfs in the Local Group
	<b>Speaker</b> Prof. Jeon Myoungwon
	11:30-12:00
	Exploring the stellar ionising continuum of galaxies in the context of cosmic reionisation
	<b>Speaker</b> Prof. Anne Verhamme
	12:00-12:20 CEMP stars: their origin and connection with stars that reionized the Universe
	Speaker
12:20	Dr Mahavir Sharma